

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/6/7,6/9A
Source: 1FW16
Date Processed by STIC: 1/28/05

ENTERED



RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/617,619A

TIME: 16:22:48

Input Set : A:\Substitute Sequence Listing.ST25.txt

Output Set: N:\CRF4\01282005\J617619A.raw

P. 6

RAW SEQUENCE LISTING

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```

77 145          150          155          160
80 Lys Gly Glu Cys Pro Trp Gln Val Leu Leu Val Asn Gly Ala Gln
81          165          170          175
84 Leu Cys Gly Gly Thr Leu Ile Asn Thr Ile Trp Val Val Ser Ala Ala
85          180          185          190
88 His Cys Phe Asp Lys Ile Lys Asn Trp Arg Asn Leu Ile Ala Val Leu
89          195          200          205
92 Gly Glu His Asp Leu Ser Glu His Asp Gly Asp Glu Gln Ser Arg Arg
93          210          215          220
96 Val Ala Gln Val Ile Ile Pro Ser Thr Tyr Val Pro Gly Thr Thr Asn
97 225          230          235          240
100 His Asp Ile Ala Leu Leu Arg Leu His Gln Pro Val Val Leu Thr Asp
101          245          250          255
104 His Val Val Pro Leu Cys Leu Pro Glu Arg Thr Phe Ser Glu Arg Thr
105          260          265          270
108 Leu Ala Phe Val Arg Phe Ser Leu Val Ser Gly Trp Gly Gln Leu Leu
109          275          280          285
112 Asp Arg Gly Ala Thr Ala Leu Glu Leu Met Val Leu Asn Val Pro Arg
113          290          295          300
116 Leu Met Thr Gln Asp Cys Leu Gln Gln Ser Arg Lys Val Gly Asp Ser
117 305          310          315          320
120 Pro Asn Ile Thr Glu Tyr Met Phe Cys Ala Gly Tyr Ser Asp Gly Ser
121          325          330          335
124 Lys Asp Ser Cys Lys Gly Asp Ser Gly Gly Pro His Ala Thr His Tyr
125          340          345          350
128 Arg Gly Thr Trp Tyr Leu Thr Gly Ile Val Ser Trp Gly Gln Gly Cys
129          355          360          365
132 Ala Thr Val Gly His Phe Gly Val Tyr Thr Arg Val Ser Gln Tyr Ile
133          370          375          380
136 Glu Trp Leu Gln Lys Leu Met Arg Ser Glu Pro Arg Pro Gly Val Leu
137 385          390          395          400
140 Leu Arg Ala Pro Phe Pro
141          405
144 <210> SEQ ID NO: 2
145 <211> LENGTH: 30
146 <212> TYPE: DNA
147 <213> ORGANISM: Human
149 <400> SEQUENCE: 2
150 gctagccacc atggtctccc aggccctcag
153 <210> SEQ ID NO: 3
154 <211> LENGTH: 39
155 <212> TYPE: DNA
156 <213> ORGANISM: Human
158 <400> SEQUENCE: 3
159 cgagcccat ttcccggatc cgcagagccc aaatcttgt
162 <210> SEQ ID NO: 4
163 <211> LENGTH: 39
164 <212> TYPE: DNA
165 <213> ORGANISM: Human

```

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```

167 <400> SEQUENCE: 4
168 cgagcccat ttcccgatc cgcagagccc aaatcttgt 39
171 <210> SEQ ID NO: 5
172 <211> LENGTH: 23
173 <212> TYPE: DNA
174 <213> ORGANISM: Human
176 <400> SEQUENCE: 5
177 ttgccggccg tcgcactcat tta 23
180 <210> SEQ ID NO: 6
181 <211> LENGTH: 701
182 <212> TYPE: PRT
183 <213> ORGANISM: Human
185 <400> SEQUENCE: 6
187 Met Val Ser Gln Ala Leu Arg Leu Leu Cys Leu Leu Leu Gly Leu Gln
188 1 5 10 15
191 Gly Cys Leu Ala Ala Gly Gly Val Ala Lys Ala Ser Gly Gly Glu Thr
192 20 25 30
195 Arg Asp Met Pro Trp Lys Pro Gly Pro His Arg Val Phe Val Thr Gln
196 35 40 45
199 Glu Glu Ala His Gly Val Leu His Arg Arg Arg Arg Ala Asn Ala Phe
200 50 55 60
203 Leu Glu Glu Leu Arg Pro Gly Ser Leu Glu Arg Glu Cys Lys Glu Glu
204 65 70 75 80
207 Gln Cys Ser Phe Glu Glu Ala Arg Glu Ile Phe Lys Asp Ala Glu Arg
208 85 90 95
211 Thr Lys Leu Phe Trp Ile Ser Tyr Ser Asp Gly Asp Gln Cys Ala Ser
212 100 105 110
215 Ser Pro Cys Gln Asn Gly Gly Ser Cys Lys Asp Gln Leu Gln Ser Tyr
216 115 120 125
219 Ile Cys Phe Cys Leu Pro Ala Phe Glu Gly Arg Asn Cys Glu Thr His
220 130 135 140
223 Lys Asp Asp Gln Leu Ile Cys Val Asn Glu Asn Gly Gly Cys Glu Gln
224 145 150 155 160
227 Tyr Cys Ser Asp His Thr Gly Thr Lys Arg Ser Cys Arg Cys His Glu
228 165 170 175
231 Gly Tyr Ser Leu Leu Ala Asp Gly Val Ser Cys Thr Pro Thr Val Glu
232 180 185 190
235 Tyr Pro Cys Gly Lys Ile Pro Ile Leu Glu Lys Arg Asn Ala Ser Lys
236 195 200 205
239 Pro Gln Gly Arg Ile Val Gly Gly Lys Val Cys Pro Lys Gly Glu Cys
240 210 215 220
243 Pro Trp Gln Val Leu Leu Leu Val Asn Gly Ala Gln Leu Cys Gly Gly
244 225 230 235 240
247 Thr Leu Ile Asn Thr Ile Trp Val Val Ser Ala Ala His Cys Phe Asp
248 245 250 255
251 Lys Ile Lys Asn Trp Arg Asn Leu Ile Ala Val Leu Gly Glu His Asp
252 260 265 270
255 Leu Ser Glu His Asp Gly Asp Glu Gln Ser Arg Arg Val Ala Gln Val
256 275 280 285

```

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```

259 Ile Ile Pro Ser Thr Tyr Val Pro Gly Thr Thr Asn His Asp Ile Ala
260      290      295      300
263 Leu Leu Arg Leu His Gln Pro Val Val Leu Thr Asp His Val Val Pro
264 305      310      315      320
267 Leu Cys Leu Pro Glu Arg Thr Phe Ser Glu Arg Thr Leu Ala Phe Val
268      325      330      335
271 Arg Phe Ser Leu Val Ser Gly Trp Gly Gln Leu Leu Asp Arg Gly Ala
272      340      345      350
275 Thr Ala Leu Glu Leu Met Val Leu Asn Val Pro Arg Leu Met Thr Gln
276      355      360      365
279 Asp Cys Leu Gln Gln Ser Arg Lys Val Gly Asp Ser Pro Asn Ile Thr
280      370      375      380
283 Glu Tyr Met Phe Cys Ala Gly Tyr Ser Asp Gly Ser Lys Asp Ser Cys
284 385      390      395      400
287 Lys Gly Asp Ser Gly Gly Pro His Ala Thr His Tyr Arg Gly Thr Trp
288      405      410      415
291 Tyr Leu Thr Gly Ile Val Ser Trp Gly Gln Gly Cys Ala Thr Val Gly
292      420      425      430
295 His Phe Gly Val Tyr Thr Arg Val Ser Gln Tyr Ile Glu Trp Leu Gln
296      435      440      445
299 Lys Leu Met Arg Ser Glu Pro Arg Pro Gly Val Leu Leu Arg Ala Pro
300      450      455      460
303 Phe Pro Gly Ser Ala Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys
304 465      470      475      480
307 Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu
308      485      490      495
311 Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu
312      500      505      510
315 Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys
316      515      520      525
319 Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys
320      530      535      540
323 Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu
324 545      550      555      560
327 Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys
328      565      570      575
331 Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys
332      580      585      590
335 Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser
336      595      600      605
339 Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys
340      610      615      620
343 Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln
344 625      630      635      640
347 Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly
348      645      650      655
351 Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln
352      660      665      670
355 Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn

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```

356          675          680          685
359 His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
360          690          695          700
363 <210> SEQ ID NO: 7
364 <211> LENGTH: 232
365 <212> TYPE: PRT
366 <213> ORGANISM: Human
368 <400> SEQUENCE: 7
370 Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
371 1          5          10          15
374 Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
375          20          25          30
378 Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
379          35          40          45
382 Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val
383          50          55          60
386 Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln
387 65          70          75          80
390 Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln
391          85          90          95
394 Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala
395          100          105          110
398 Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro
399          115          120          125
402 Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr
403          130          135          140
406 Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser
407 145          150          155          160
410 Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
411          165          170          175
414 Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr
415          180          185          190
418 Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe
419          195          200          205
422 Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
423          210          215          220
426 Ser Leu Ser Leu Ser Pro Gly Lys
427 225          230
430 <210> SEQ ID NO: 8
431 <211> LENGTH: 641
432 <212> TYPE: PRT
433 <213> ORGANISM: Artificial
435 <220> FEATURE:
436 <223> OTHER INFORMATION: Synthetic
439 <220> FEATURE:
440 <221> NAME/KEY: misc_feature
441 <222> LOCATION: (6)..(7)
442 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
444 <220> FEATURE:

```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 01/28/2005
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 6,7,14,16,19,20,25,26,29,35

Seq#:8; Xaa Pos. 6,7,14,16,19,20,25,26,29,35

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,8,9,10,11,12,13,14

VERIFICATION SUMMARY

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L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:40 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0

M:341 Repeated in SeqNo=1

L:476 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0

M:341 Repeated in SeqNo=8